WHAT IS CLAIMED IS:

1. A method of aligning two optical wireless links, each optical wireless link having a light beam having a field of view, comprising:

sweeping the first light beam of the first optical wireless link through a first pre-defined pattern;

sweeping the second light beam of the second optical wireless link through a second pre-defined pattern;

wherein the first light beam transmits position data for the first light beam and the second light beam transmits position data for the second light beam;

detecting the second light beam at the first optical wireless device;

transmitting on the first light beam the position data for the second light beam;

detecting the first light beam at the second optical wireless device; and

transmitting on the second light beam, the position data for the first light beam.

2. The method of claim 1 wherein said first and second pre-defined patterns are spiral patterns.

3. The method of claim 1 wherein the position data for the first and second light beams comprises x and y coordinates for the light beam position.

4. The method of claim 1 wherein the position data for the first and second light beams comprises radius and angle coordinates for the light beam position.

5. The method of claim 1 wherein the position data for the first and second light beams comprises a time stamp from which a previous X and y coordinate is calculated.

6. The method of claim 1 wherein the position data for the first and second light beams comprises values in a control packet.

7. The method of claim 1 wherein the transmitting steps comprise modulating a light beam to convey information.

8. The method of claim 1 further comprising:

aligning the first light beam to the position data detected in the second light beam;

and aligning the second light beam to the position data detected in the first light beam.

9. The method of claim 1 wherein the first light beam transmits a default value for position data for the second light beam prior to the step of detecting the second light beam at the first optical wireless device.

10. The method of claim 1 wherein the position data for the first light beam is updated periodically at a first rate and wherein the position data is transmitted periodically at a faster rate.

11. An optical wireless link comprising:

a light beam transmitter configured to transmit a first light beam;

a light beam steering device, the light beam steering device configured to steer the light beam in a pre-defined pattern during an alignment acquisition phase;

a light beam modulator, configured to modulate the first light beam with light beam position information;

a photodetector configured to receive a second modulated light beam containing alignment feedback information;

wherein the light beam steering device aligns the modulated light beam to a position indicated by the alignment feedback information; and

wherein the light beam modulator is configured to modulate the first light beam with a portion of the alignment feedback information subsequent to the photodetector receiving the second modulated light beam.

12. The optical wireless link of claim 11 wherein the portion of the alignment feedback information is second light beam position information received from a second optical wireless link.

13. The optical wireless link of claim 11 wherein the light beam steering device is a micro-mirror.

14. The optical wireless link of claim 11 further comprising:

control circuitry configured to encapsulate the light beam position information in a network protocol packet.

15. The optical wireless link of claim 11 wherein the pre-defined pattern is a expanding spiral.

16. The optical wireless link of claim 11 wherein the light beam position information includes x and y coordinates for the light beam steering device.

17. The method of claim 11 wherein the position data for the first and second light beams comprises radius and angle coordinates for the light beam position.

18. The method of claim 11 wherein the position data for the first and second light beams comprises a time stamp from which a previous X and y coordinate can be calculated.

19. The optical wireless link of claim 11 wherein the light beam position information includes a sample number.

20. A method of communicating between two data devices comprising:

coupling a first data device to a first optical wireless link;

coupling a second data device to a second optical wireless link;

aligning the first and second optical wireless links, the aligning step including:

modulating a first light beam with first position information and sweeping the first light beam through a pre-defined acquisition pattern;

modulating a second light beam with second position information and sweeping the second light beam through a pre-defined acquisition pattern;

detecting the second light beam at the first optical wireless device;

detecting the first light beam at the second optical wireless device;

echoing the second position information back to the second optical wireless device via the first light beam;

echoing the first position information back to the first optical wireless device via the second light beam;

aligning the first light beam to a position indicated by the second echoing step; and

aligning the first light beam to a position indicated by the second echoing step; and

communicating data between the first and second data devices over the first and second light beams, subsequent to the aligning step.

21. The method of claim 20 further comprising:

transmitting data from the first data device in an electrical format and converting it to an optical format prior to the communicating step.

22. The method of claim 20 further comprising sweeping the first and second light beams through a second pre-defined acquisition pattern after the steps of aligning the first light beam and aligning the second light beam, respectively.

23. The method of claim 20 further comprising:

periodically sensing the position of the first light beam and the position of the second light beam and updating the first position information and second information, respectively.

24. The method of claim 23 wherein the first and second position information is transmitted periodically on said first and second light beams, respectively and the rate of transmission is greater than the rate at which the position information is updated.

25. The method of claim 20 wherein at least one of said first and second data devices is a computer.

26. The method of claim 20 wherein at least one of said first and second data devices is a network.

27. The method of claim 20 wherein at least one of said first and second optical wireless links is a modem.

28. The method of claim 20 wherein said pre-defined acquisition pattern is an over-lapping spiral.